BUCK FOR WILDLIFE NEWSLETTER

Buck for Wildlife Newsletter Spring/Summer 1997 ISSN# 1203-4266

Historical Surveys of Fisheries in the Northeast Boreal Region

Remember those tales that your grandfather told you about fishing in the good old days? You know, the ones that included lots of animated arm gestures and adjectives about size and numbers? You probably didn't think at the time that those stories had any scientific value. Guess again. Fisheries biologists are using those very stories to help develop present-day fisheries management plans for Alberta's sport fish. It is necessary to know the historical status of fish populations in order to set appropriate management goals. Scientific data is usually lacking for most historical fisheries, but traditional knowledge does exist. When researchers compile information from "old-timers," and other sources of historical information such as museum archives and old photographs, the result is a historical survey. Such a survey was conducted in the Lac La Biche and Cold Lake areas last year, and the information gathered is proving to be very useful—and an eye-opener as well.

People tend to forget. When we compare fishing today with fishing from yesteryear, we tend to limit our comparisons to a relatively short time frame. Most young anglers don't know what fishing in Alberta was like before their own lifetime. Our limited perspective tends to give us the impression that fish populations haven't really changed very much over time. However, when present-day catch rates and average sizes of fish are compared with information from the distant past, a different picture emerges about the state of our fisheries.

Walter Penner and Paul Poirier – Cold Lake Trout

Overall, it appears that many of our fish populations were being overharvested in the 1920s and 1930s. By the 50s and 60s, the fish populations in many lakes had collapsed. Since then, many more populations have been overharvested to the same degree. Here are some of the comments collected about specific lakes:

Lac La Biche:
1925 - "would throw in a hook and catch a fish every time."
1935 - "could throw out a hook 3 to 4 times and get 3 to 4 pike easily. Now you can fish all day and not get a fish."

continued next page...

Pinehurst Lake:
1941 –"Lots of 8 to 9 pounders. A great walleye lake."
–"Huge pike of 10 to 12 lb. It was nothing to get lots of pike this size."

1955 –"Great lake for walleye. You would see many in the 8 lb. range."
–"Great for pike. You would get a lot in the 15 to 20 lb. range."

1970 –"Average walleye was in the 4 lb. range."
–"Good fishing for pike, but they weren't very big. Usually 2 to 4 lb. You were lucky to get one of 4 lb."

Beaver Lake:
1946 –"Used to be a good walleye lake. Would always get some, but never any that were too big."
–"Lots of pike. Average weight was 4 to 6 lb."

1960s –"Good fishing for perch."
–"Couldn't keep the pike off the hook. Average size was 2 to 5 lb."

1970s –"Was full of pike in the 3 to 4 lb. range."
–"Lots of perch in the lake."
–"Three people would get 7 or 8 walleye in a day."

Lake after lake, the stories sound very familiar. The historical survey is showing us how our fisheries changed over time: how they used to be and how they might be again. The information gathered in this project will be incorporated into pike and perch management work in 1997.

For more information on this project, please contact David Park at 427-3574.

The Grand Old Osprey

The osprey is the most cosmopolitan of Alberta's hawks, but sometimes it needs human help when it comes to building a house! Osprey live near sea coasts, rivers, and lakes, but in recent years, a lack of adequate nesting sites due to land-clearing and the removal of dead trees has become a problem. Many people think that osprey are spectacular birds to watch and photograph, so they have been "pitching in." In the Southern East Slopes Region, a unique program has begun that allows wildlife managers to erect artificial nesting platforms. This has been a joint project between Natural Resources Service and TransAlta Utilities, with Buck for Wildlife funds covering most of the costs. The Rocky Fish and Game Association and Peace Air have also contributed to this project.

Artificial stands have become suitable homes for osprey in the Brazeau Dam Canal area. The artificial stands are composed of power poles which are driven into the substrate of the canal and topped with platforms to support the nests. One of the most interesting aspects of this project is the fact that the only practical method to install the platform poles is to drop them like big spears from a helicopter at about 400 feet! Annual surveys of osprey nests along the Brazeau Canal have been conducted in late June or early July every year since the 1980s, and six poles were dropped successfully in 1983 and another six in 1984. Another eight poles were successfully dropped in October, 1996.

Once osprey have a home, they don't feel the need to move. They use the same nests year after year. The project at the Brazeau Dam Canal area ensures that osprey will be able to live near their food supply, fish, for a long, long time. All of the organizations and people involved with this project have helped osprey by creating places for them to make nests.

For more information on this project, please contact Eldon Bruns at 845-8230.

BUCK FOR WILDLIFE

Alberta Conservation Association

A New Fish and Wildlife Resource Steward

What is the Alberta Conservation Association?

On April 1, 1997, the newly-formed Alberta Conservation Association (ACA) was delegated much of the authority and responsibilities contained in the Fish and Wildlife Trust Fund Regulations. At the same time, the Fish and Wildlife Trust Fund was extinguished, and all unspent funds were turned over to the ACA. Primarily, this change was made so that the monies set aside from the sale of hunting and sportfishing licences for resource conservation and management enhancement programs would continue to serve the needs of fish and wildlife and those who contribute to resource conservation. This change also provided Alberta's conservation organizations an opportunity for direct involvement in the management of our fish and wildlife resources through their membership in the ACA. With the delegation of most of the authorities and responsibilities of the former trust fund to the ACA, sportsmen's monies will continue to be used for the purposes for which they were collected.

Approximately 30 years ago, the Fish and Wildlife Trust Fund began as the Wildlife Damage Fund. Over the years, this fund expanded as hunters and anglers supported new programs through increases to their licence fees, called enhancement levies. The allocation of the funds collected was administered by advisory committees whose membership included many non-govemment conservation organizations. It is these organizations who have demonstrated an on-going commitment to our fish and wildlife resource who will now be responsible for the management and administration of the levies collected from hunting and sportfishing licences.

The ACA's Mandate

Incorporated under the Alberta Societies Act, the ACA is a separate legal entity, independent of government. The ACA has been empowered under regulation to establish and collect levies on hunting and sportfishing licences and to carry out the following functions, broadly described as follows:

- inventory, develop and enhance populations of fish, wildlife and endangered species in Alberta (Buck for Wildlife);
- provide for the payment of rewards to persons who assist in the detection of resource-related violations (Report A Poacher); and
- provide compensation for damage or loss caused by wildlife or the use of a weapon during an open season (Wildlife Support).

The ACA will carry out these functions through the implementation or support of various projects and in a manner consistent with the resource management priorities of Alberta Environmental Protection (AEP). Some logistical support and assistance with program delivery will be provided by AEP. As the mandates of the ACA and AEP are closely linked, these two entities will be working together in the interests of our fish and wildlife resources. For example, the population inventories made possible through the ACA will be used by AEP staff to prepare species management plans.

The ACA's Membership and Staff Complement

The seven founding charter members of the ACA are Trout Unlimited Canada, Western Walleye Council, Alberta Fish and Game Association, Professional Outfitters Association of Alberta, Alberta Trappers Association, Federation of Alberta Naturalists and Grand Council of Treaty Eight. A nine-member Board of Directors will guide the ACA. Two directors have been elected from each of the ACA's three advisory groups: the Fisheries Caucus, the Wildlife Caucus, and the Report A Poacher Caucus. These directors also represent various conservation organizations. The Minister of AEP and the Alberta Fish and Game Association have each appointed one director to the Board and two directors representing the public-at-large will soon be elected by the Board. The ACA's Board of Directors includes: Deryl Empson, Dave Gursky, Sven-Erik Jansson, Don Pike, Dave Powell, Andy Von Busse and Glen Semenchuk (Chair).

Daily operations of the ACA are overseen by a Managing Director who reports to the Board of Directors. The Managing Director ensures that the objectives of the ACA are being met and acts as a liaison to government agencies, industry and non-govemment organizations. The ACA is pleased to welcome Dr. Terry Neraasen as Managing Director. With a strong

continued on back

...continued

academic and professional background in wildlife management, Dr. Neraasen has a Ph.D. in Zoology from the University of Manitoba and has held the position of Chief Biologist with Ducks Unlimited, one of Canada's leading conservation organizations.

The ACA's staff complement consists of approximately 65 biologists, technicians, communications personnel, and support staff, most of whom were formerly employed through the Fish and Wildlife Trust Fund. These staff members will carry out over one hundred projects under the ACA's mandate throughout the province this year. Most of these projects will be carried out in partnership with local interest groups and AEP's Natural Resources Service.

The ACA's Advantage

In addition to inheriting very successful resource conservation and management enhancement programs, the ACA has a distinct "private sector" advantage. The ACA has greater flexibility to make the most of the levies collected from sportsmen. Investment and fund-raising opportunities can now be explored. However, the ACA's major strengths will continue to lie in its programs (listed in the next column), most of which are very familiar to Alberta's hunters, anglers and landowners. Of these programs, the first four belong to the Buck for Wildlife "family" of programs. The first Buck for Wildlife programs were implemented in 1973, initially focusing on the maintenance, enhancement and creation of fish and wildlife habitat. Over the years resource management enhancement programs have been added.

The Fisheries Management Enhancement Program helps meet the demands of Alberta's recreational fisheries by focusing on the collection and analysis of biological data for the formulation of program strategies. This program serves to enhance fish production and protection in order to maintain our provinces's fish populations. Projects include fish population assessment and monitoring of resource use.

The Fisheries Habitat Development Program serves to retain, enhance or create fish habitat, with a focus on self-sustaining species. This program also targets retention, enhancement and development of high-quality habitat to ensure the viability, diversity and geographic distribution of fish species in Alberta. Promotion of these habitat goals results in increased public awareness and a change in public attitudes.

The Wildlife Management Enhancement Program funds projects that help to conserve wildlife populations. Projects include inventory, restoration and reintroduction activities, as well as fostering awareness and understanding of the status and needs of wildlife.

The Wildlife Habitat Development Program serves to retain, enhance or create wildlife habitat. In so doing, this program ensures that a suitable habitat base exists to sustain the diversity and geographic distribution of wildlife in Alberta. Habitat development projects focus on species requiring support and long term retention of high-quality habitat.

The Report A Poacher Program serves to create and maintain public interest and participation in the prevention of resource violations. Through public education, the program strives to generate increased detection and apprehension of resource violators through payment of rewards to persons who provide information to Alberta Environmental Protection.

The Wildlife Support Program serves to prevent damage or loss of property caused by migratory game birds and to provide compensation for the adverse effects of wildlife. It is through the compensatory function of the Wildlife Support Program, that Alberta's producers are reimbursed for damages to livestock resulting from the use of a weapon during an open hunting season.

ACA - A Partner in Conservation

Because membership in the ACA includes both consumptive and non-consumptive resource user groups, not only are the interests of the sportfishing, hunting and trapping populations being served, but the interests of all Albertans as well. Our fish and wildlife resources are an integral part of our heritage and it is important to maintain a visionary approach to conserving this heritage for generations to come. It is the strong belief of the ACA founding members that by working together toward this common goal, all interests can be served.

For more information, contact:

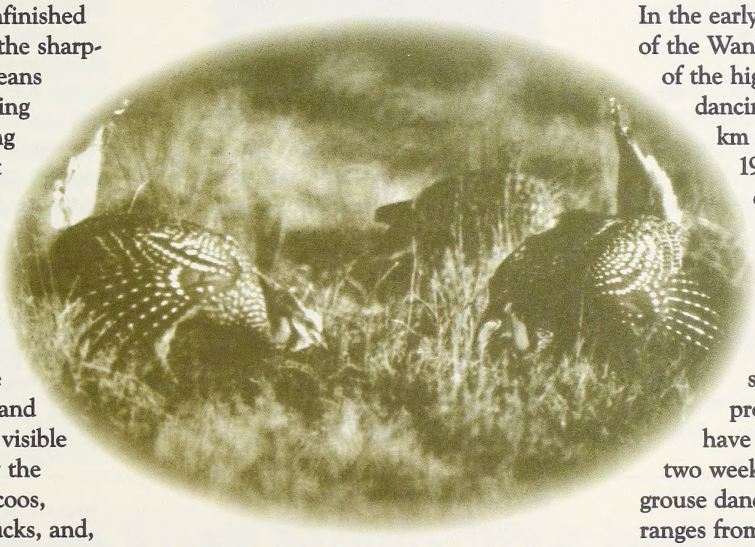
Alberta Conservation Association
4th Floor, Bramalea Building
9920 - 108 Street
Edmonton, Alberta
T5K 2M4

Phone (403) 427-5192
Fax (403) 422-6441

Spring Dance

In April, it's hard to believe that spring will ever come to the Peace Country; there's so much snow still in the fields. All of the animals are anticipating the spring melt so they can take care of some unfinished business in the fields that were covered by snow last fall. What unfinished business, you ask? For the sharp-tailed grouse, spring means returning to their dancing grounds for their mating season. As the days get longer, the sharp-tailed grouse (called "sharpies" by some) become more active on the dancing grounds, called leks. This is the place where territory is established and courtship begins. Both visible and audible displays by the sharpies are frequent: coos, gobbles, cork notes, clucks, and, of course, dancing. Sharp-tailed grouse stomp their feet and rattle their tails, providing one of nature's most spectacular spring shows.

A number of people in the Northwest Boreal Region like to see this show whenever they can. A typical spring morning in April or May for the "sharp-tailed grouse crew" begins as early as 4:30 AM as the Alberta Conservation Association staff-members and some volunteers head off in different directions to search for lek sites. They find these sites by driving, walking, and flying. Much help comes from the public and volunteers, who often report sightings to the crew, enabling the crew to focus on specific lek sites.



Why all the fuss over these birds? Populations of sharp-tailed grouse have experienced declines of 50 to 70 percent over the past 30 years. Habitat loss and intensified agricultural practices have contributed to these declines. By identifying sharp-tailed grouse habitat areas, wildlife managers can introduce land-use strategies that benefit both agriculture and wildlife. Such strategies include delaying hay-cutting, planning grazing systems, and protecting woody vegetation. Landowners who have leks on their land have demonstrated genuine concern for sharp-tailed grouse. They want to know what they can do to maintain or increase the sharp-tailed grouse population. This habitat program began in 1995 through the Fish and Wildlife Trust Fund and will continue with the Alberta Conservation Association for five years.

In the early 1960s, certain areas of the Wanham region had some of the highest densities of dancing grounds per square km in Alberta. By the mid 1960s the numbers had declined, and this decline was attributed to habitat loss because of extensive clearing of aspen and willow. The 1997 spring lek surveys look promising; ten new sites have been identified in just two weeks. The number of grouse dancing on the snow ranges from five to 20 at each site. The sunrise crew of Leanne, Chris, Ed, Cam, and numerous volunteers will continue more surveys throughout the spring. The early bird does not get the worm, but he might get a good cup of coffee, a beautiful sunrise, and a front row seat at nature's spring dance.

For more information on this project, please contact Cameron Broatch at 624-6405.

In our next issue...

Did you know that the Buck for Wildlife Program is 25 years old? Watch for a feature on our history and a look toward the future in an interview with the new managing director of the Alberta Conservation Association, Dr. Terry Neraasen.

Correction: In the last issue of the Buck for Wildlife Newsletter, we neglected to acknowledge that Kananaskis Country was also a contributor of funds to the interpretive bull trout hikes. We apologize for this omission and commend them for their involvement in this project!

Abandoned Farmstead Habitat Retention Project

Abandoned Farmstead Project

Natural Resources Service and Big Country Fish and Game Association in Oyen began this cooperative project in 1992. In many settled areas of Alberta, the only wildlife habitat remaining is on abandoned farmsteads where remnant shelter-belts, yards, and old buildings provide shelter and access to food. Abandoned farmsteads provide valuable habitat for a variety of wildlife species. They also prevent soil from drifting, retain snow cover in winter, and provide shelter for animals. Since 1992, a total of 18 sites have been fenced to restrict all use, and over 25 signs have been erected to recognize landowners' contributions to preserving wildlife habitat. Landowner contacts are made by Big Country Fish and Game Association volunteers, who inspect the sites, explain the program to landowners, and confirm sites that landowners have consented to be fenced. The farmsteads are fenced for complete protection through this project, and farmsteads that were not fenced have been recognized as wildlife preservations sites with signs from Alberta Fish and Game Association's "Heritage Farmstead Program." The success of this project is directly due to the efforts of the Big Country Fish and Game Association, whose neighbourly approach has resulted in a warm reception from the community. Funding for the fencing is made possible by the Buck for Wildlife Program.

For more information on this project, please contact Randy Lee at 381-5281.

North Raven River Brown Trout and Brook Trout Spawning Survey Summary

The North Raven River is a spring-fed river located approximately 30 km southeast of Rocky Mountain House, Alberta. It is rated as one of Alberta's best brown trout streams and endures heavy angling pressure from anglers who come from all over Alberta. The North Raven River is characterized by stable water flows and stable temperatures. Approximately 1/4 of the river, from the headwaters downstream, remains ice-free throughout the winter.

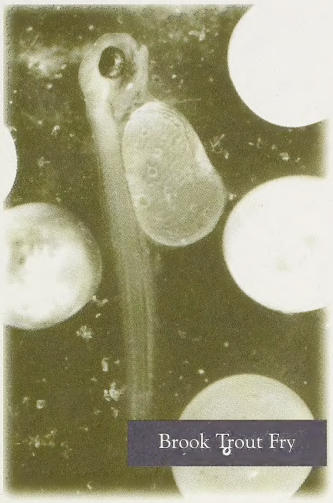
The North Raven River contains naturally-reproducing populations of brown trout and brook trout.

The Buck for Wildlife Program has provided funding through the Fisheries Management Enhancement Program to conduct spawning surveys on the river in the fall of 1995 and the fall of 1996. The goal of the two-year project was to establish benchmark information on brook trout and brown trout spawning and to identify crucial spawning areas for habitat protection. A secondary objective was to assess angler pressure and the possibility that redds were being trampled on during the spawning season. Studies have found that depending on wading frequency and stage of egg or fry development, a significant number of eggs or pre-emergent fry are killed. During the 1995 spawning survey, 397 brown trout redds and 208 brook trout redds were found. During the 1996 spawning survey, 504 brown trout redds and 282 brook trout redds were found. Redds were found in the same general areas both years. Brown trout redds were concentrated in the upper half of the river where spawning habitat does not appear to be limited. However, limited spawning habitat was found in the lower half of the river. Spawning occurred between early October and late December, peaking near October 30. It was determined that brown trout start and finish spawning earlier the farther downstream they are.

continued next page...

Brook trout redds were concentrated in the spring-influenced areas between the headwaters of the river and up to two kilometres downstream. Two large springs near the headwaters accounted for approximately 55% of all brook trout redds found. Spawning occurred between mid-October and late December, peaking near November 7. Brook trout spawning habitat appears to have been degraded due to silt accumulation and substrate compaction.

Angler pressure in the fall appears to be limited. However, angler pressure in the early spring appears to be more of a concern. During this time, brown trout eggs and brook trout eggs in the headwaters have hatched, and fry remain in the gravel to absorb their egg sacs.



Brook Trout Fry

Brown trout eggs that are farther downstream are still at the eyed stage of development. Both stages of development are vulnerable to angler trampling.

Due to the number of redds in the upper half of the river, anglers are asked to walk on riverbanks whenever possible. Try to avoid instream wading in springs or gravelled-riffle areas where many trout spawn. Protection of spawning areas will ensure that this important fishery in Alberta is maintained and even improved for future generations of anglers.

For more information on this project, please contact David DeRosa at 845-8230.

Bow River Bike Patrol

For the past two summers, mountain bicycles have been used by Fish and Wildlife Officers with Natural Resources Service in Calgary to get their message out to the public. In particular, they are reaching people who enjoy the recreation opportunities the Bow River has to offer as it winds through the city of Calgary.

The bikes were acquired through the Fisheries Management Enhancement Program, and they are used in conjunction with Alberta Environmental Protection's volunteer program. Concerned and active citizen volunteers like Colin Fitzpatrick, whose picture appears with this article, have taken to the bike paths that run along the Bow River. Volunteers meet with anglers and the general public, discussing concerns and assessing angling success and trends. Volunteers exchange information with anglers: they might give out a brochure on the Report A Poacher program and receive some information about the angler's fishing experience in return. This kind of information is valuable to the Fisheries Management Division.

Colin Fitzpatrick

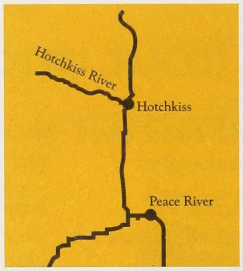
Officers use the bikes regularly to patrol the river area as well. They have found this mode of transportation to be very effective in monitoring public compliance with sportfishing regulations while also encouraging personable interaction between the public and enforcement staff. The summer of 1997 will once again see both volunteers and officers out and about along one of Canada's finest trout rivers, thanks to the mountain bikes that were obtained from the Fisheries Management Enhancement Program.

For more information on this project, please call Stan Webb, District Fish and Wildlife Officer, at 297-6136.

BUCK FOR WILDLIFE
NEWSLETTER

Arctic Grayling Assessment Program in the Northwest Boreal Region

Arctic grayling are a popular sportfish found in numerous streams and rivers throughout the Northwest Boreal Region of Alberta. Their brilliant colouration and the fact that they are easily angled make them a very enjoyable and popular sportfish. Currently, Arctic grayling populations within this region appear to be stable. However, increased levels of industrial development causing habitat degradation, as well as an increase in harvest levels, may be putting this species in jeopardy. In order to ensure that healthy, viable Arctic grayling populations will continue to exist in the Northwest Boreal Region, the Alberta Conservation Association will be carrying out an assessment program that has been designed to monitor the population dynamics of Arctic grayling over time.



This year, the Alberta Conservation Association will be performing assessments along the Hotchkiss River, located approximately 150 km north of Peace River, and along the Kakwa River, located approximately 100 km south of Grande Prairie. Historical information suggests that grayling populations in these rivers are stable. However, due to increasing levels of industrial development and angling pressure, the status of these population levels need to be verified. This will give managers access to current and detailed information regarding the populations in question. Grayling length distributions and age distributions, from which growth rates can be calculated, as well as estimates of population size, will be made available to fisheries managers, allowing them to make sound decisions about the Arctic grayling resource in northwestern Alberta.

The assessment program will consist of capturing and marking fish within a representative section of river, using two methods: float electrofishing and angling. By using two capture techniques, a more representative sample of the population can be captured. As well, the effectiveness of angling as a scientific capture technique can be validated against estimates obtained from float electrofishing. These two methods will allow fisheries technicians and biologists to compare past information with new information as they continue to monitor grayling populations scientifically in northwestern Alberta.

For more information on this project, please contact Travis Ripley or Trevor Thera at 624-6405.

The Buck for Wildlife Newsletter is published in an effort to inform and educate the public about fisheries and wildlife habitat enhancement projects. A portion of the cost of each hunting and fishing licence is put into enhancement projects, and this newsletter is designed to let you know what your money is doing.

BFW Newsletter production
Editor: Natalie Cook
Editorial Board:
Laverne McAthey
Ken Crutchfield

Fisheries Management Advisory Committee:
Morley Barrett
Ron Beck
Al Bibaud
Ken Crutchfield
Dennis Giggs
David Gursky
Vern McIntosh
Darryl Smith
Norm Rodseth

Wildlife Advisory Committee:
Robert Andrews, chair
Tom Beck
Dave Gibson
Gerald Gustavson
Allen Lamouche
Todd Loewen
Toni Mercredi
Ron Pittman
Darren Richardson
Glen Semenchuk
Bobby Turner
Andy Von Busse

Buck forWildlife Newsletter
c/o Fisheries Management Division
North Tower, Petroleum Plaza
9945 - 108 Street
Edmonton, Alberta
T5K 2G6
Attention: Natalie Cook

The Buck for Wildlife Newsletter is produced by the Alberta Conservation Association in cooperation with Alberta Environmental Protection, Natural Resources Service.

Alberta
ENVIRONMENTAL PROTECTION
Natural Resources